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FOOD NEWS

FOR CONSUMERS

Volume 1 Number 1

Spring 1990

U.S. Department of Agriculture
Food Safety and Inspection Service



Is Someone You Know
At Risk for
Foodborne Illness?



FOOD NEWS

FOR CONSUMERS

Spring 1990
Vol. 7, No. 1

Food News for Consumers is published by USDA's Food Safety and Inspection Service, the agency charged with ensuring the safety, wholesomeness and proper labeling of the nation's meat and poultry supply. The magazine reports how FSIS acts to protect public safety, covering research findings and regulatory efforts important in understanding how the agency works and how consumers can protect themselves against foodborne illness.

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People Facing Special Risks

**An introduction to this issue by
USDA's Assistant Secretary for Marketing and
Inspection Services, Jo Ann R. Smith**



As the first woman president of the National Cattle-men's Association, Jo Ann Smith's knowledge of the meat industry came from her own experience as a rancher. An industry activist concerned with consumer issues, she was instrumental in instituting feeding and breeding changes that produced leaner meat. Now, as Assistant Secretary for Marketing and Inspection Services, she oversees the Food Safety and Inspection Service and six other USDA agencies.

My twenty-some years of experience in the food industry have underscored for me the importance of educating consumers about food production, food processing and food safety. My number one priority here at the Department of Agriculture is food safety. That doesn't mean just *responding* to concerns, it means taking the initiative about food safety.

This issue represents one of those initiatives—providing food safety information to people who face special risks from foodborne disease. These groups include the elderly, pregnant women, infants and people with chronic illnesses. All these people have vulnerable or weakened immune systems. Thus, they face a greater chance of getting sick from foodborne bacteria, and once ill, the health consequences can be serious.

Does that mean people with weakened immune systems should just avoid foods of animal origin? Not at all. Meat, poultry, eggs and dairy products are checked by federal inspectors before arriving in the marketplace. They are also critical sources of vitamins and nutrients.

Still, it's important for consumers to understand that animal foods aren't sterile. They must be handled with care, a goal easily achieved by following basic rules of food safety. Those guidelines are the focus of this issue. With your help and cooperation in communicating this information, people facing special risks *won't* necessarily be facing illness.

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Expectant Mothers and Young Children Are Especially Vulnerable to Foodborne Illness

What makes these groups particularly susceptible?

Dr. Mitchell Cohen at the Centers for Disease Control, Atlanta, explained: "Any illness a pregnant woman contracts can affect her unborn child whose immune system is too immature to fight back." To a lesser extent, Cohen said, newborns and children under one are also more vulnerable because of undeveloped immune systems.

But You Can Control The Risks. By following the basic rules of food safety, whether you're eating at home or out, you can act to prevent foodborne illness.

Eating Out. Everyone likes eating out, but to protect yourself from possible foodborne illness, make sure your food is well-cooked. Don't eat any partially-cooked hamburgers, rare roast beef, raw or underdone fish or raw oysters. Also avoid foods with raw or undercooked eggs, like Caesar salad. Don't eat any unpasteurized dairy products like imported soft cheese or raw or "natural" milk.

These foods all have one thing in common—they can contain bacteria or other harmful organisms that could make you quite sick.

At Home. You need to be careful at home too. Take perishable food straight home from the grocery. Use meat, poultry and fish within a day or two or freeze it.

Never eat raw or undercooked meat, poultry, seafood or eggs. Meat and fish should be cooked all the way through and soups and casseroles should "bubble." Don't nibble uncooked cookie dough containing raw eggs.

Make sure your baby's formula doesn't get contaminated with bacteria or other organisms. How could this happen? Say you've been cutting raw chicken or steak, then fit the liner into your baby's bottle without washing your hands. Your hands could be a source of foodborne bacteria.

Always wash your hands thoroughly after handling raw meat, poultry or fish.

Make sure hamburger is well-cooked, particularly for children. Though rare, bacterial infections from undercooked hamburger can cause a disease which can lead to severe complications for young children, including kidney failure.

The Cat Question. If you're pregnant and don't have a cat, this isn't a good time to get one. If you're pregnant and already have a cat, someone else should be cleaning out the litter box. Why?

Cat feces can contain a parasite that can cause an illness called **toxoplasmosis**. If you touch anything the cat's feces have

touched, like litterbox contents, then touch food without thoroughly washing your hands, you may become ill. The illness can cause you to miscarry or have a baby with serious birth defects.

Toxoplasmosis can also be contracted from infected meat, such as pork and lamb, you may bring home from the store. So again, remember to cook your meat well and wash your hands after handling raw meat.

Caution. Another foodborne bacteria, *Listeria monocytogenes*, can also cause miscarriage and illness in newborns. *Listeria* has been found in unpasteurized milk, imported soft cheese, hot dogs, lunch meats and spreads.

To control listeria, refrigerate any food marked "refrigerate." Don't buy or use foods that are past their "use-by" dates. Don't keep lunch meats or spreads more than two weeks after you buy them. And use or discard open packages in 3-4 days.

More questions? Call the toll-free Meat and Poultry Hotline at 1-800-535-4555, 10 to 4, weekdays, EST. Washington, D.C. area residents call 447-3333.



The Sixty-Plus Set Faces Special Risks From Foodborne Disease

You're over sixty and you face a greater risk of becoming sick from foodborne bacteria. Is that bad news?

No. Because you can take preventive measures by following the basic rules of food safety whether you are eating at home or out.

Why do older people need to be a bit more careful?

According to Joe Carlin, a nutritionist with the U.S. Health and Human Services' Administration on Aging, when you're older your body has less stomach acid, which limits your ability to fight bacteria found in food. Your immune system also weakens with age, leaving you more vulnerable to bacteria.

Finally, Carlin said, as we age our senses don't work quite as well. "You can't necessarily rely on your sense of smell to alert you that the meat is spoiled or the milk is sour," he said.

Does that mean you need to "worry" about all the foods you love to eat? Not at all. "We just need to adjust our habits to our bodies. As we get older some of us need to start wearing bifocals in order to read. It may also be time to change some food habits in order to eat safely," he said.

Protecting Yourself When You Eat Out. People over sixty are on-the-go today. In fact, they eat out as frequently as any other segment of the population. Just remember these food safety tips next time you're ordering:

- Never eat raw or undercooked meat, poultry or seafood. For instance, steak tartare (a raw hamburger dish) and raw oysters are risky. Oysters can contain several dangerous bacteria and viruses.

- Avoid foods with undercooked or raw eggs. That includes Caesar salads, hollandaise sauce, some custards and chocolate mousse. If you're not quite sure whether the food contains undercooked eggs, ask the waiter or waitress, or just avoid it.

At Home. According to Carlin, improper thawing of frozen foods is an important cause of foodborne illness in older people. Foods should be thawed in the refrigerator, *not on the counter*. Food can also be safely thawed in the microwave or under cold running water.

Another common problem is keeping leftovers too long. Either use leftovers in 3-4 days or throw them out.

Finally, Carlin cautioned, don't forget the *cutting board connection*. If juice from raw meat, poultry or fish is on the cutting board, said Carlin, "bacteria from that unwashed board can make you sick when you use it to prepare other foods."

And that holds true for anything—counters, utensils, hands—that contacts raw meat or fish. Wash utensils and surfaces

with hot, soapy water after contact with these raw products before further food preparation.

The Egg Problem. Lots of people like to use raw eggs in milk or have some soft-scrambled eggs. But raw and undercooked eggs have become an increasing source of salmonella infections. When you use eggs, make sure they are fully cooked with no soft yolks or whites.

For more information on how to stay fit with safe food, see the Protect Yourself chart, p. 7.

More questions? Call the toll-free Meat and Poultry Hotline at 1-800-535-4555, 10 to 4, weekdays, EST. Washington, D.C. area residents call 447-3333.



People With Weakened Immune Systems Are Vulnerable to Foodborne Disease

People with weakened immune systems face special risks from foodborne disease. "Not only are they more likely to develop food-born disease, they are also more likely to have serious complications as a result," said Dr. Patricia Griffin at the Centers for Disease Control, Atlanta.

Who is vulnerable? Most people with weakened immune systems have a chronic illness of some type such as cancer, kidney failure, chronic liver disease, diabetes or AIDS.

But Their Risks Can Be Controlled. By following basic rules of food safety, vulnerable people can help protect themselves whether they eat at home or out.

Protecting Yourself When You Eat Out. The single most important thing for you to remember when you eat out is *never* eat any raw foods of animal origin.

Eating raw oysters, for example, could cause problems. Raw oysters can contain a number of harmful organisms including a particularly deadly bacteria, *Vibrio vulnificus*. For people with liver disorders, mortality rates from this disease can run as high as 50 percent, according to Dr. Griffin.

It's also important not to eat other foods raw, or even undercooked. That means no uncooked meat (like steak tartare), rare roast beef, undercooked hamburger or raw fish. Also avoid foods with raw or undercooked eggs, like Caesar salad, hollan-

daise sauce, some custards or chocolate mousse.

The rule is this: Foods should be well-cooked and they should be served to you hot, not lukewarm. Cooking foods thoroughly destroys potentially harmful organisms, and not allowing foods to stand longer than two hours at room temperature helps keep them safe.

At Home. According to the Centers for Disease Control, one of the most important causes of foodborne illness at home is "cross-contamination." Cross-contamination occurs when juice or blood from uncooked meat, poultry or fish comes into contact with *other* foods via cutting boards, utensils, plates, counters or hands.

So when you cut up raw chicken on your cutting board, place it on a plate, then bread it



in a bowl and finally put it in the oven, the **sources of potential foodborne disease are?**

The cutting board. The knife. The plate. The bowl. The counter. And your hands. All need to be thoroughly washed with hot, soapy water.

One final word on a special concern, **raw or undercooked eggs**. Recent data suggests that raw or undercooked eggs may be a significant source of salmonella infection. This is important information for people with weakened immune systems, especially those receiving chemotherapy, since they sometimes turn to soft eggs as a protein source. Eggs, however, need to be thoroughly cooked to be safe. (See the Protect Yourself chart, p. 7.)

More questions? Call the USDA Meat and Poultry Hotline at 1-800-535-4555, 10 to 4, weekdays, EST. Washington, D.C. area residents call 447-3333.

AIDS Advisory.

AIDS patients are the single fastest-growing group of people facing increased risk of foodborne illness.

Marked increases in incidences of salmonella infections in AIDS patients have been reported (*Journal of Infectious Diseases*, Vol. 158, No. 3, Sept. 1988, p. 668).

AIDS patients are also more vulnerable to a newly troublesome bacteria, *Listeria monocytogenes*, which can have serious health consequences.

Protect Yourself From Foodborne Illness

Most Important

NEVER eat raw meat, poultry, seafood or eggs. Raw food can contain dangerous bacteria and other disease-causing organisms.

DON'T SPREAD BACTERIA FROM RAW FOOD TO OTHER FOOD. Wash hands, utensils, cutting boards and counters that contact raw food before taking the next step in food preparation.

COOK RAW FOOD THOROUGHLY—to at least 160° F—to kill any bacteria present. For meat, check that juices run clear and that there's no pink when you cut into meat or poultry. Cook eggs solid, both yolk and white.

Follow these Guidelines at Each Step of Food Handling



Shopping—
Don't buy food in
damaged containers

Don't buy cans or glass jars with dents, cracks or bulging lids. This can be a sign the food contains food poisoning organisms.



Cold Storage—
Keep perishable food cold!

Refrigerate perishable food as soon as you get home from the store. Check with an appliance thermometer to make sure the refrigerator registers 40° F or lower. The freezer should register 0° or lower.

Store canned goods in a cool, dry place for use within a year. Never put them above the stove, under the sink or in a garage or damp basement.



Thawing—
Don't thaw on the counter

Bacteria grow quickly at room temperature. Thaw food in the refrigerator the night before or in the microwave just before cooking.



Food Preparation—
Keep work areas clean,
cook well

Wash hands, utensils, and cutting boards in hot, soapy water before preparing food and after handling raw meat or poultry.

Use a plastic cutting board instead of a wooden one where bacteria can hide in grooves and multiply.

Cook meat well to at least 160° F. Red meat is done when it's brown or gray inside. Poultry juices run clear. Fish flakes with a fork.



Serving—
Never leave food at
room temperature over 2 hours

When serving a buffet, keep cold food on ice. Or use small serving trays to present food from the refrigerator. For hot food, you should re-heat small servings from the refrigerator to replenish the buffet from time to time.



Leftovers—
Small, shallow containers
speed cooling

Divide food into small containers for quick cooling in the refrigerator. Remove stuffing from poultry or other meats and refrigerate it separately.

Spring-cleaning The Kitchen

Sorting through the kitchen may not sound exciting. But cleanliness is essential to food safety. And

following the proper storage times for perishable foods protects you from taste changes that occur when items stay frozen too long and food poisoning that can strike when food sits in the refrigerator too long. Canned and dry goods don't last forever either. Read on.



Instructor Chicken says the refrigerator should be cold—the freezer should be

0° F, the refrigerator section not over 40° F. And CLEAN IT OUT before you put food back. Baking soda in water will cut mold inside the box. Bleach in water will take mold off rubber linings—check bottle for directions.

Start with the Refrigerator

Check frozen food—If the freezer is jam-packed and frozen over, it can't work well. Also ice crystals can invade food causing quality loss.

Discard old, frozen-over goods. Keep other packages if they're not past the use-by date.

Defrost the freezer if necessary. Date the packages you save and place them up front for early use.

Is "forgotten" meat or poultry still usable? Thaw it in the refrigerator. If it smells and looks okay, cook it right away.

Check refrigerated food—This part should be easier since refrigerated items usually announce their need to be discarded.

Remember, though, that fresh poultry only keeps 1 to 2 days; fresh meat, 3 to 5 days. Most leftovers will keep 3 to 4 days. Canned hams needing refrigeration last about 9 months. Vacuum-packed meats

last 2 weeks unopened; 5-7 days opened.



Look at Countertops & Cabinets

Check flour, sugar, tea and spices on your countertops. Clean under and around canisters and boxes. Now look inside your canisters. In a tight-lidded canister, sugar will last 2 years. Likewise, properly stored, flour should last 6-8 months. But discard flour if you see weevils, small brownish-black bugs that attack in warm weather.

In an air-tight tin, teabags maintain good quality for about 18 months. Unopened ground coffee in a can lasts 2 years. Opened ground or freeze-dried coffee crystals lasts about 2 months, after that refrigerate it.

Instructor Chicken says home-canned goods should be used within a year.

DON'T STORE SPICES OVER THE STOVE! Put them in a cabinet away from heat. Whole spices last about a year; ground spices, 6 months.

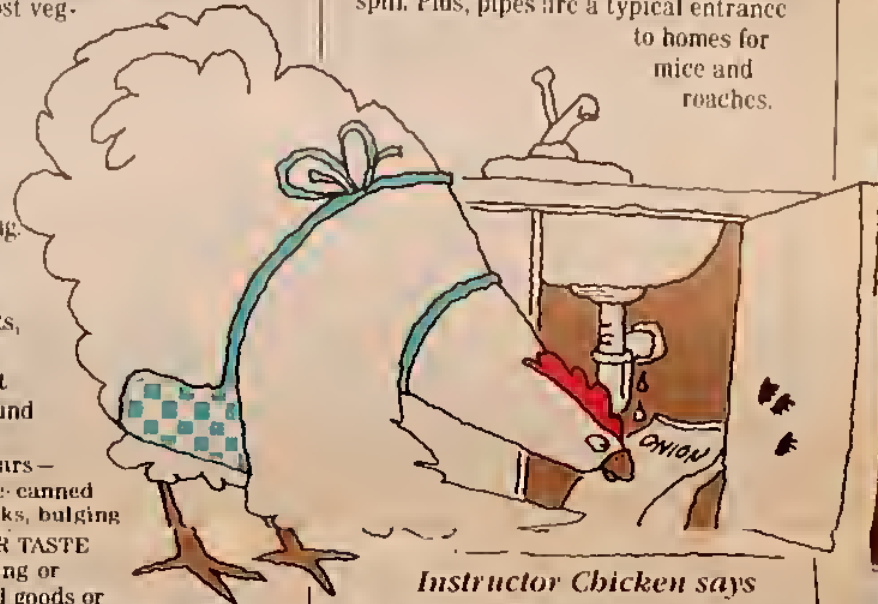
Check your canned goods, bottles, pastas, macaroni and mixes. "On the shelf" means forgotten, doesn't it? So it's critical that you check these items for "eating fitness." Boxed spaghetti or pasta should last a year or more; dry cake or similar mixes about a year. Check packages for use-by dates. Low-acid commercially canned goods (meat, poultry and most vegetables except tomatoes) last 2-5 years in a "healthy" can—no dents, holes, rusting, bulging or leaking. High-acid canned goods (tomato products, most fruit and fruit juices) last 18 months in sound containers.

Check glass jars—especially home-canned goods—for cracks, bulging product. NEVER TASTE suspicious-looking or smelling canned goods or anything that spurts liquid when opened. Wrap such things in heavy

plastic and discard them in a secure trash can. They could contain deadly botulism food poisoning.

Check under the Sink

A number of hazards can lurk under the sink. Leaky pipes can drip on food, causing mold and spoilage. Household chemicals or poisons stored there could spill. Plus, pipes are a typical entrance to homes for mice and roaches.



Instructor Chicken says never store food under the sink!

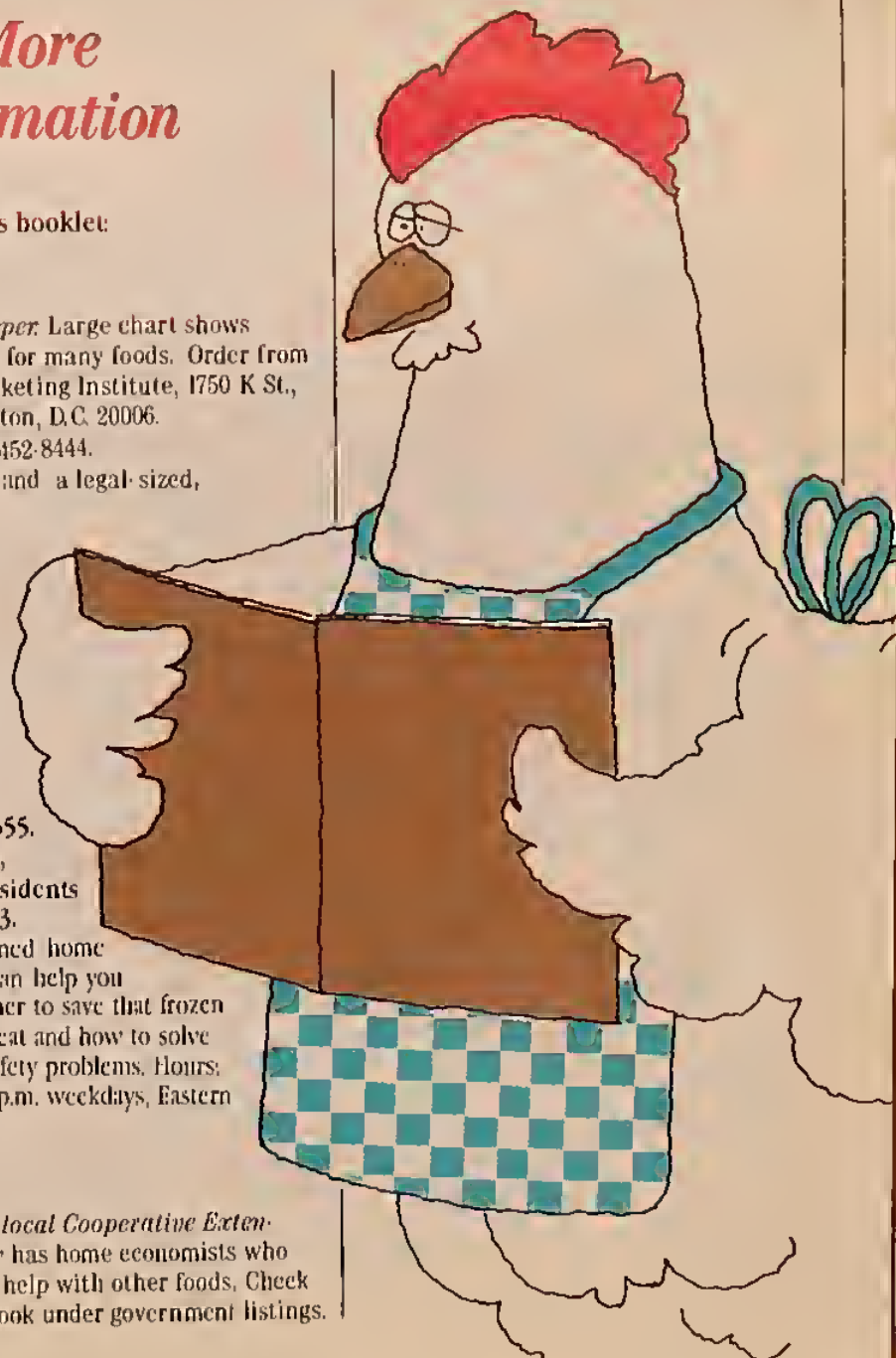
For More Information

Write for this booklet:

The Food Keeper. Large chart shows storage times for many foods. Order from the Food Marketing Institute, 1750 K St., NW, Washington, D.C. 20006. Phone: (202) 452-8444. Enclose \$.50 and a legal-sized, stamped, self-addressed envelope.

Or call USDA's Meat & Poultry Hotline, 1-800-535-4555. Washington, D.C. area residents call 447-3333. Specially trained home economists can help you decide whether to save that frozen "mystery" meat and how to solve other food safety problems. Hours: 10 a.m. to 4 p.m. weekdays, Eastern Time.

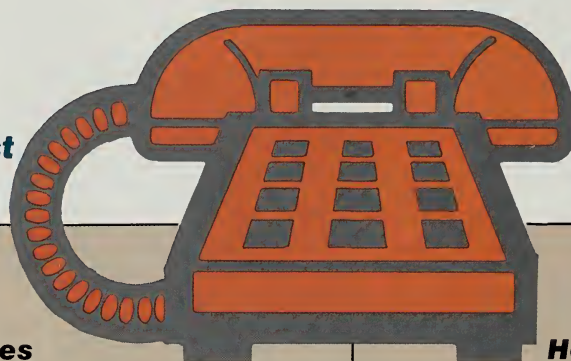
PLUS, your local Cooperative Extension Service has home economists who can provide help with other foods. Check the phone book under government listings.



Pregnant or Caring for a Young Child? Over Sixty? Chronically Ill or in Cancer Treatment?

Help Is Just

a Phone Call Away



National Services

The American Association of Retired Persons offers free publications and lists of service groups. Call 1-202-872-4700 or write AARP, 1909 K Street, NW, Washington, D.C. 20049.

Appetite and nutrition during cancer treatment posing a problem? Order a free copy of *Eating Hints—Recipes and Tips* from the Office of Cancer Communications, NCI, Bldg. 31, Rm. 10A24, Bethesda, Md. 20892. Phone: 1-800-4-CANCER.

With questions on safe food handling and storage—Call USDA's Meat and Poultry Hotline 10 to 4 weekdays, EST, 1-800-535-4555. Washington, D.C. area residents call 447-3333.

Local Services

Local chapters of the American Dietetic Association, the American Cancer Society and similar groups are good sources of educational material.

Nutrition education—Call the Red Cross for information about two training programs: "Staying Healthy After 50" and "Better Eating for Better Health."

Need help with a special diet, recipe ideas? Check with local hospital dietitians or the Visiting Nurse association. To find a Visiting Nurse group near you, call 1-800-426-2547.

Your local Cooperative Extension Service can help with basic food and nutrition questions. Check the phone book under government listings.

Hotline Numbers To Know

These tollfree numbers offer information and referral services.

Aging, National Council on
1-800-424-9046. Information for care-givers.
Publications catalogue available on request.

AIDS, National Hotline
1-800-342-AIDS. General questions. Free literature in braille, several languages. Referrals: legal, medical, counseling, coping & support.

Cancer Information Service
1-800-422-6237. Questions on treatment, symptoms, financial aid, support groups.

American Diabetes Association
1-800-232-3472. Patient education and family services, counseling and referrals, support groups, youth camps and activities. Free publications catalogue.

American Dietetic Association
1-800-877-1600. Information, guidance and referral to professional dietitians in local areas.

Diabetes Research Foundation
1-800-223-1138. Informational assistance for the special needs of diabetics.

Kidney Fund
1-800-638-8299. Brochures on kidney disease, financial assistance for patients with chronic kidney failure.

Liver Foundation
1-800-223-0179. Literature on liver diseases, physician referral.

News Wires

Microwave Browning Devices May Be A Problem

Consumers should be aware that there may be a problem with some metallic package materials designed to brown microwave foods.

These "heat susceptors," thin films metallized with aluminum, usually laminated with adhesive onto paperboard, absorb microwave energy to produce temperatures hot enough to "brown" or "crisp" foods.

You find them in microwave popcorn bags, cardboard pizza crisping platforms and in packages of microwave French fries, fish sticks and Belgian waffles.

While the components of heat susceptors were originally approved by the Food and Drug Administration, that okay was based on usage at temperatures below 300° Fahrenheit.

FDA is now concerned that some of the products are reaching 500° F. This could mean that package components are breaking down and migrating into the food itself.

For that reason, FDA is asking industry and the scientific community for data and other information to demonstrate the safe use of these components in heat susceptor packaging.

Until a final determination from safety test results is made, consumers can protect themselves by following these guidelines:

1. Do not exceed microwaving times recommended on package instructions.

2. If packaging, such as popcorn bags, become extremely brown or charred, do not consume the product.

3. Do not reuse heat susceptors or use them for a purpose other than that originally intended by the manufacturer.

—CiCi Williamson

1990—The Year of the Label

This year may well be recorded as the "year of the label." Increasing consumer interest in the nutritional value of foods has stimulated a movement to "build a better food label."

What led up to all of this? In 1989, both the Food and Drug Administration and the U.S. Department of Agriculture (USDA) took steps to review and possibly redesign nutrition labels on food packages.

In the latter part of 1989, the Food and Drug Administration (FDA) and USDA held joint public hearings in Chicago, San Antonio, Seattle and Atlanta to solicit specific ideas on how to improve nutrition labels. Opinions were gathered about issues such as:

Should nutrition labels be required for all packaged foods?

What nutrients should be listed on the nutrition label?

Should the format of the nutrition label be changed to make it easier to use and understand?

Should there be definitions for descriptions such as "light", "low fat" and "high fiber"?

Should health claims be allowed?

FDA and USDA heard testimony from individuals representing consumer groups, health professionals and the food industry. The results of these comments will be summarized and used in determining changes in the nutrition label.

In another major labeling initiative, FDA and USDA's Food Safety and Inspection Service (FSIS) contracted with the National Academy of Sciences (NAS) for a twelve-month study costing \$500,000. The NAS Committee will make recommendations to USDA and FDA regarding: 1) the best policy for labeling, 2) the ideal label format, and 3) methods to harmonize FSIS and FDA labeling policies. The NAS also plans to hold several public hearings on the topic. The NAS report and recommendations should be completed by fall 1990.

Feedback received from consumers, health professionals and the food industry may result in some of the biggest changes in label rules since nutrition labels first appeared in 1973.

—Pat Moriarty

Predatory Bacteria Come to the Rescue to Combat Salmonella

Scientists at the U.S. Department of Agriculture are studying some bacteria that, while harmless to humans, can be deadly to salmonella bacteria.

The scientists are testing ways to use these rod-shaped bacteria, known as *bdellovibrio*, in food processing and packaging.

Studies will determine if the parasitic bacteria can be commercially adapted as a spray to stop salmonella and other bacterial growth in meats, eggs and powdered milk during processing.

Grill Our Experts With Your Food Safety Questions



Call the
USDA Meat
and Poultry Hotline
for food safety facts

1-800-535-4555

10:00 am–4:00 pm
Eastern Time

Washington, DC 447-3333

The bacteria might also be added to packaged meats sold at the grocery store. If salmonella start growing at either the store or in a consumer's refrigerator, *bdellovibrio* would eat the harmful bacteria.

"Although this is the first time anyone has tried to use a predatory bacteria to ensure food safety, adding bacteria to food is not a new concept," said Dr. Richard Whiting, a research food technologist with the Agricultural Research Service's (ARS) Microbial Food Safety Research Unit in Philadelphia.

Some bacteria are currently used to make yogurt, pepperoni, pickles and many other foods.

ARS scientists have also found bacteria that preserve fruit by competing with fungi that cause decay.

"It will take at least a year to grow the bacteria and test their performance as a natural control mechanism," said Dr. Whiting. The strains they'll be working with are *Bdellovibrio bacteriovorus*, *B. starrii* and *B. stolpii*. Common in soil and water, people often swallow these bacteria while swimming in river, lake or ocean waters.

Meanwhile, the risk of salmonella and other foodborne bacterial growth can be reduced by proper refrigeration and making

sure meat is thoroughly cooked. For further details, contact Dr. Richard Whiting, 1-215-233-6437.

—Liz Lapping

In 1989, USDA's Meat and Poultry Hotline Received 64,000 Questions!

A record 64,000 consumers called USDA's Meat and Poultry Hotline for food safety advice in fiscal year 1989. Consumers who called during the Hotline's operating hours (10 to 4, EST) talked to home economists and registered dietitians on staff. After hours, they heard recorded messages on food safety.

Last year, as in the past, the great majority of questions—71 percent—concerned basic safe food handling and storage. Many of these dilemmas presented a clear risk of illness. Fortunately, our staff was able to guide consumers to appropriate action at these critical points in food handling.

Most of the remaining 29 percent of inquiries were more technical. Some were beyond the scope of the Hotline and were referred to other agencies.

Poultry products were the focus of most of the storage and handling concerns. Not surprisingly, November was the liveliest time of year for the Hotline staff, with 18 percent of the year's incoming calls received that month.

Increased consumer awareness of the link between eggs and salmonellosis prompted several thousand egg safety questions. As the year progressed, the egg safety questions moved from general queries to specific, recipe-related problems.

Callers also had significant safety concerns on:

- (1) Mail-order meat and poultry products;
- (2) Produce and the role of

agrichemicals in growing fruits and vegetables;

(3) Product recalls;

(4) Pathogens newly noted as health threats like *Escherichia Coli* 0157:H7;

(5) The European Economic Community's ban on meat from animals receiving growth hormones and

(6) The dating and labeling of meat and poultry.

Overall, consumers tended to ask about turkey, chicken, eggs, beef and pork. Complaints were just two percent of all inquiries.

Eighty-six percent of those calling were consumers, with business, government and the media making up the difference.

The Eastern, then the Pacific time zones produced the most calls. Seventeen percent of Hotline callers had used the service once before. First-time callers learned of the service predominantly from newspapers, magazines and USDA's Cooperative Extension Service.

For Your Information:

Consumers with questions on the handling of meat, poultry and other perishable foods can call USDA's Meat and Poultry Hotline at 1-800-535-4555, 10 to 4 weekdays, Eastern Standard Time. In the Washington, D.C. metropolitan area, phone 447-3333.

—Linda Burkholder

Pesticides in the Home Garden?

Spring is coming and you just can't wait to get started with your home vegetable garden. But you are concerned about what pesticides to use. Will they leave harmful residues in food? How long will they last in the soil? Are they harmful to pets or fish in nearby streams?

Now there is help for homeowners as well as farmers and other pesticide users. It's a publication called EXTOTOXNET, which stands for Extension Toxicology Network. This set of factsheets contains basic information on the 100 most commonly-used pesticides.

Each factsheet lists the generic name of the pesticide and the more commonly-known trade name. Plus, there is information about a pesticide's effect on the environment and how it breaks down after use. And it's all written in plain English.

EXTOTOXNET was prepared jointly by the Cooperative Extension Service offices of Cornell University, the University of California, Michigan State University and Oregon State University. The Environmental Protection Agency

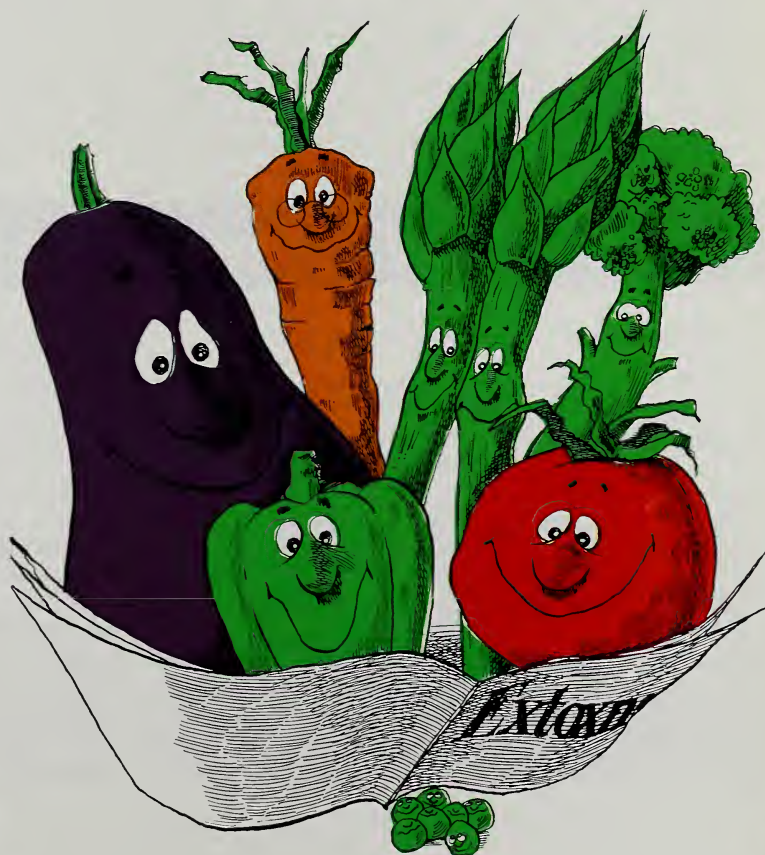
provided major funding for the project.

The complete set of pesticide summaries can be purchased for \$29.00. Individual factsheets are not for sale. The summaries may be purchased from Cornell University, Distribution Center, Building 8, Ithaca, N.Y. 14853. To phone in orders, call 1-607-255-7660.

Reference copies are available from each State land-grant university's Extension pesticide coordinator. You can also contact your county Extension office to inquire about a reference copy.

For those people who have computers with a telephone modem, EXTOTOXNET will be available for access by computer from Cornell University in the near future.

—Herb Gantz



From USDA's Meat and Poultry Hotline

A MICROWAVE HANDBOOK

The popularity of microwave cooking continues to grow—almost every American household possesses at least one oven. Yet, concerns about the safety of cooking meat and poultry products in the microwave persist. Even the cookware and plastic wraps used in the ovens have come under question.

Plus, there are traits, unique to microwave cooking, that affect how completely food is cooked. "Cold spots" can occur because of the irregular way the microwaves enter the oven and are absorbed by the food.

Since we have traditionally relied on thorough cooking to kill bacteria that may be present in

food, consumers should take simple, yet effective steps to ensure even cooking when using a microwave.

USDA's Meat and Poultry Hotline currently receives some 5,700 consumer calls each month. The national tollfree number is 1-800-535-4555. Washington, D.C. area residents call 447-3333.

How to Microwave Safely

Defrosting

- *When using the microwave to defrost foods, plan to finish the cooking immediately.* Some areas of larger food items may begin to cook during the defrost cycle, raising the temperature to a point where bacteria can flourish.
- *Remove food from store wrap prior to thawing.* Foam insulated trays and plastic wraps are not heat stable at high temperatures. They can melt or warp from the food's heat, possibly causing chemicals to migrate into the food.
- *Don't defrost or hold food at room temperature for over 2 hours.* It is easy to forget all about a food item thawing in the microwave oven. Set a timer to sound an alert when the thawing time is up.

Cooking

- *Debone large pieces of meat.* Bone can shield the meat around it from thorough cooking.
- *Arrange food items uniformly in a covered dish,* and add a little liquid. Under the cover, steam helps kill bacteria and ensure uniform heating. Either plastic wrap or a glass cover works well. Many recipes suggest venting a small area, allowing some steam to escape. Plastic wrap shouldn't touch the food.
- *Cook large pieces of meat at 50% power for longer periods of time.* This allows the heat to reach deeper portions without overcooking outer areas. Commercial oven cooking bags can also help even out cooking and provide a tender product.
- *Move the food inside the dish several times during cooking.* Stir soups or stews. If you don't have a

turntable, turn the entire dish during cooking. This is especially important for foods like casseroles that can't be stirred.

- *Do not cook whole, stuffed poultry in the microwave.* The bones and density of the bird do not allow even cooking. Microwaves may not thoroughly cook the moist stuffing deep inside the bird either.

- *Never partially cook food.* If planning to combine microwave cooking with conventional roasting, broiling or grilling, transfer the microwaved foods to conventional heat immediately.

- *Use a temperature probe or meat thermometer to verify the food has reached a safe temperature.* Check the temperature in several places, avoiding fat and bone. It should reach 160° F for red meat; 180° for poultry.

- *Make allowances for oven wattage variations.* Because ovens vary in power and operating efficiency, make sure food is done. Use a meat thermometer and visual signs to check doneness. Juices should run clear, and meat should not be pink.

- *Observe the standing time given in the recipe.* It is necessary to complete the cooking process.

Warming Precooked Foods

- *Cover precooked foods with microwave-safe plastic, waxed paper or a glass lid.* This will keep moisture in and provide even cooking.

- *Heat leftovers and precooked food to at least 160° F.* Food should be very hot to the touch and steaming before it is served.

- *Use caution when warming baby food.* Stir toddler foods thoroughly and taste-test them yourself for child-safe temperatures. Shake milk or formula in a bottle before tasting as it can become extremely hot.

What Utensils, Wraps and Cookware Should Be Used in the Microwave?

Glass and glass ceramic cookware are safe for microwave cooking. But what about other materials?

- *Use only those containers and products that have been approved for microwave use.* These items are designed to withstand the high temperatures possible when cooking foods that have a high fat or sugar content.

- *Avoid the use of cold storage containers.* Margarine tubs, whipped topping bowls and cottage cheese cartons, for example, have not been approved for microwaving. High heat could cause chemicals to transfer into the food.

- *Waxed paper is safe.* Other paper goods such as towels, plates and napkins have not been tested for use in cooking. If using these items, for optimal safety, use only plain white paper goods.

- *Never use brown grocery bags and newspapers.* These contain recycled materials and metals which could start a fire.

- *Avoid letting plastic wrap touch foods during microwaving.* It's fine to cover utensils with plastic wrap, but unless the wrap is a heavy-duty type, it could melt in contact with hot foods.

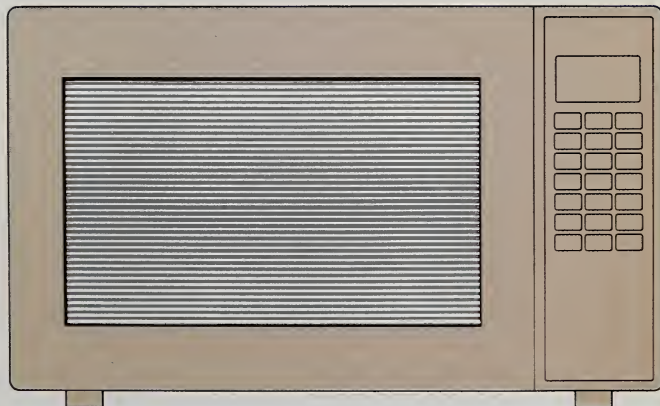
- *Oven cooking bags are safe for use in the microwave.* They are made from a very tough nylon material. Oven bags also promote even cooking, which helps meat reach safe temperatures throughout.

- *Follow package directions when heating microwaveable foods with special browning or crisping devices in the package.* Never try to reuse these special browning devices. Don't eat from a package that becomes "charred" in cooking. Handle carefully, they become very hot to the touch.

- *Do not reuse trays and containers provided with microwave convenience products.* They have been designed for one-time use with that specific food only.

—Susan Templin, CiCi Williamson, Marilyn Johnston

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JOURNALISTS' CONFERENCE

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